SunTech Portable Heater

User's Manual

Model STH 1500-01 Chy, Model STH 1500-01 Map
Model STH 1500-01 Oak, Model STH 1500-01 Wal

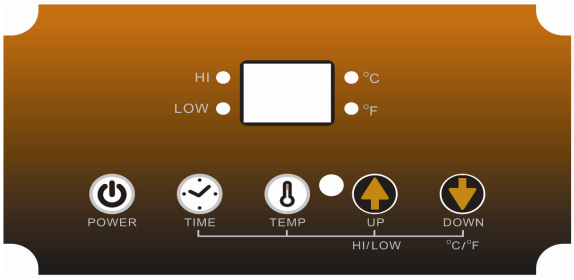
FOR INDOOR USE ONLY

120VAC 15 AMP DEDICATED CIRCUIT

Carefully and thoroughly read this manual before using the SunTech Portable Heater for the first time. We recommend keeping this manual for regular review and future reference.

QUICK REFERENCE GUIDE

Please read Owner's Manual prior to operation.



To adjust temperature or time mode, press the "TEMP" or "TIME" button. Then press the "UP" or "DOWN" button to select desired setting. The setting will automatically be saved.

"UP and "Down" arrow buttons have dual function capabilities.

Adjust Time/ Temp upward or adjust HI/LOW settings.

Adjust Time/ Temp downward or adjust ^{0}C / ^{0}F settings.

For Customer Support Call (630) 940-1530

Introduction

SunTech Portable Heaters utilize the latest infrared heat technology. SunTech Portable Heaters provide a safe, convenient, clean, and economical way to distribute heat throughout your home or business without producing deadly fumes or monoxide gases. Our heating system produces therapeutic infrared heat that can potentially relieve symptoms of cardiovascular conditions and inflammatory diseases. Infrared heat technology, in general, produces rays that are safe and highly beneficial to our bodies and health professionals have been using infrared technology for decades to treat muscle and joint pains.

The SunTech Portable Heaters are constructed of a wood housing. They come in walnut, cherry, oak, and maple finishes. They are equipped with nylon caster wheels for easy mobility. And the highly efficient filter can be maintained and cleaned by simply rinsing with warm water.

Safety

IMPORTANT INSTRUCTIONS

USE CAUTION

Save these instructions because electrical safety is essential to keeping your home safe. When using an electrical appliance, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons. Please adhere to the following safety instructions:

- The heater must be operated by an adult. Keep heater out of the reach of children.
- Only operate the heater when it is on the floor.
- Do not operate heater near any water.
- Do not plug heater into any other cord connected device such as power strip, surge protector, multiple outlet adapter, grounding adapter, outlet-type air fresheners or extension cords. Plug the heater cord directly into a 3-prong 120V 15 amp grounded circuit receptacle.
- Never plug heater cord into a loose fitting or broken receptacle.
- Never alter the heater's design or operation. Such actions will void warranty and could result in injury and/or death.
- Do not operate the heater if it has a damaged cord or plug.
- Do not operate the heater if there are signs of malfunction. If the heater has been dropped or damaged, do not operate.
- Keep combustible materials such as furniture, pillows and other bedding materials, paper(s), clothing, and curtains at least three feet away from all sides of the heater during operation.
- Always unplug heater when not in use.
- Do not use the heater outdoors.

- Do not run heater cord under carpet. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Route cord away from traffic areas.
- Do not use the heater in bathrooms, laundry rooms, or similar indoor locations.
- Turn off heater before unplugging.
- ⚠ Do not insert any foreign object or allow foreign object to enter the ventilation opening or exhaust opening as this may cause electric shock, fire, and/or injury.
- ⚠ Never block the air intake or exhaust opening in any manner as this could lead to fire.
- Do not locate heater, when in use, immediately below a receptacle.
- Never operate heater in or around a bathtub, shower, or swimming pool.
- Only open heater if instructed by an authorized representative of the manufacturer. There are limited user-serviceable parts inside.
- Use heater only as described in this manual. Any other use is not recommended by the manufacturer as it may lead to fire, electric shock, and/or series physical injury or death.

Heater Specifications

SunTech Heater Model STH 1500-01/WI-0035

Carton Size: 18.9 in x 17.3 in x 18.1 in
Heater Size: 16.3 in x 14.8 in x 14.8 in
Net Weight: 28.6 lbs
Gross Weight: 35.2 lbs
Cabinet: ¾ ply – Cherry, Maple, Oak, Walnut
Power Cord: 8 ft / 14 gauge
"HI" Function: 1500 watts
"LOW" Function: 750 watts
Power Requirement: 120V 15 amp
BTU: 5600
Heat Type: Therapeutic Quartz Infrared Heat
Heating Elements: 4 Infrared Quartz Bulbs w/ Nickel-Chrome Filament
Heating Elements Life Expectancy Potential: Rated 20,000 – 30,000 hrs
Thermostat: Electronic Analog
Fan System: Cross Flow Fan
Fan Noise Level: 46 db
Heat Chamber with Diathermanous Copper Plate
Delayed Start Function
Remote Control
Electrostatic Washable Filter
Warranty: Limited 3-Year Parts Warranty

How It Works

In short, room temperature air circulates from the rear of the SunTech Portable Heater, passes through a highly efficient filter, enters a chamber that houses the Infrared Quartz Bulbs, and exits as heated air from the Diathermanous Copper Plate constructed on the front of the unit. And it does all this with a noise level below 46db and can potentially heat up to 1000 square feet.

Components and Functions

A. The SunTech Portable Heater is constructed with Infrared Quartz Bulbs. Each Infrared Quartz Bulb rates at 1500W. These bulbs produce therapeutic infrared rays that warm the air which passes through the inner chamber. The Infrared Quartz Bulbs are constructed with a stainless steel thermal conducting housing. The incorporated twisted style increases the efficiency of the unit.

B. An AC Cross Flow Fan pushes air over these Infrared Quartz Bulbs. Cross Flow Fans create a wide flow of air using a cylindrical-shaped impeller. Air is drawn inside the SunTech Portable Heater, flows along the circumference of the chamber and over the Infrared Quartz Bulbs, and is blown out laterally creating a uniform flow of warm air.

C. The SunTech Portable Heater has a Delay Start Function which controls the AC Cross Flow Fan. The purpose of the Delay Start Function is to allow the Infrared Quartz Bulbs to heat up before the fan begins to circulate the air flow. In addition, the AC Cross Flow Fan will continue to circulate the airflow after the power is turned off to circulate the warm air from the SunTech Portable Heater cooling the unit down.

D. The air flow exits through the front of the SunTech Portable Heater. It travels from the Diathermanous Copper Plate. The Diathermanous Copper Plate is constructed from red copper making it advantageous for efficient thermal conductivity. It is a resourceful material in reflecting the infrared rays.

E. The LED Digital Display is a convenient, stylish, and modern way to display the temperature and TIME. This attractive addition compliments the SunTech Portable Heater, in that, it simplifies and makes controlling the unit easy. Operating the heater is logical and can be done on the unit itself or by remote.

F. The SunTech Portable Heater was designed with safety features. One such feature is the Overheat Automatic Shutoff design that shuts the heater off should heat rise above the prescribed limit. Also the SunTech Portable Heater was created with the Knock Over/Shut Off feature. If the portable heater is knocked over, it will automatically shut off. And if for any reason there is a power outage while the heater is operating, the heater will remain off even when the power is restored.

Unpacking the SunTech Portable Heater

1. First, check the carton to make sure there are no obvious damages that may have occurred during shipment.
2. Open the SunTech Portable Heater packaging and remove the heater by sliding it from the box. You may want to gently and cautiously turn the entire box upside down letting the heater slowly slide out.
3. Remove all the protective materials from the heater. It may be a good idea to keep the protective materials and packaging for storage during the off-season.

Operating Instructions

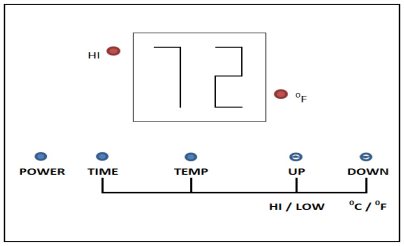
⚠ **Visually inspect the SunTech Portable Heater for any damages before operation. Do not operate the heater if any damages are detected. Contact your dealer immediately.**

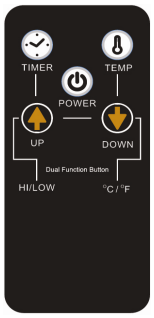
NOTE: "UP" and "DOWN" arrow buttons on the control panel and remote control have dual function capabilities.

Adjust TIME / TEMP with up arrow or adjust HI / LOW settings.

Adjust TIME / TEMP with down arrow or adjust ^{0}C/^{0}F settings.

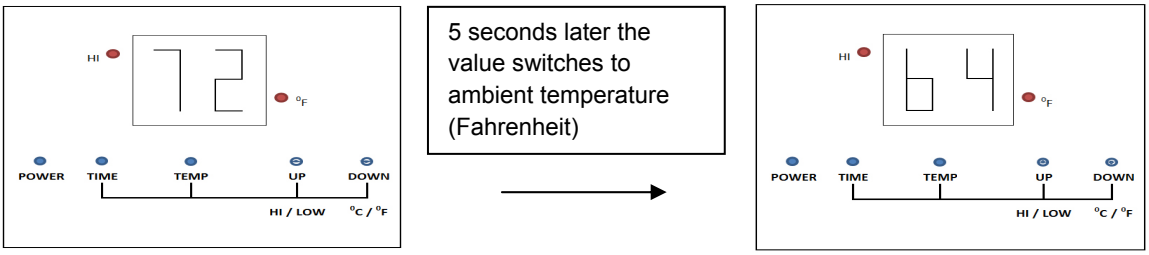
1) Plug the power cord directly into a conventional 120V 15 amp outlet and press the MASTER POWER switch on the rear of the portable heater. Then press the POWER button on the front control panel or on the remote to start the unit. The LED display will show the default value as 72^{0}F/22^{0}C.

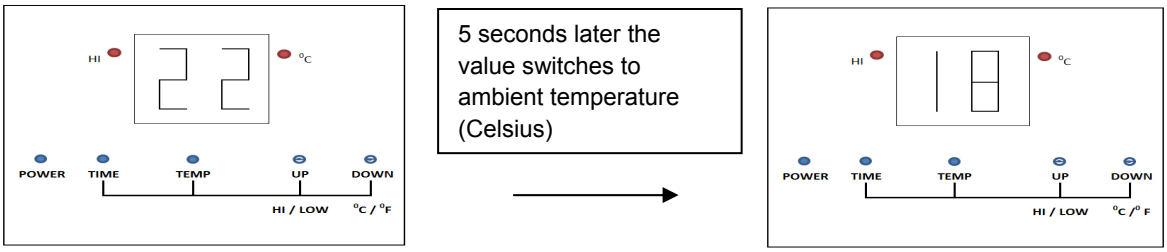




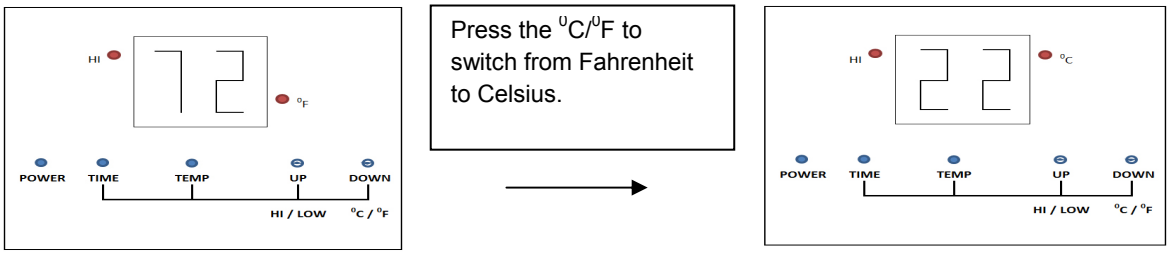
Function Display

After about (5) seconds, it will switch to the current ambient temperature. (Note: If the current ambient temperature is greater than the set temperature, the HI/LOW display, fan, and Quartz Bulbs will not operate.)

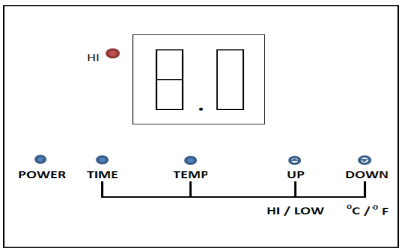




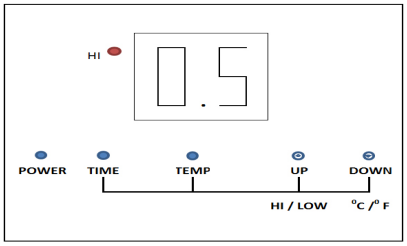
2) By pressing the ^{0}C/^{0}F button, you can switch the temperature format from Fahrenheit to Celsius and vice versa.

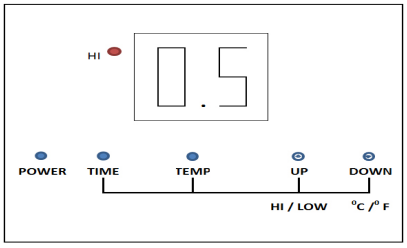


3) By pressing the TIME button, the LED display will switch from the temperature status to the TIME status and begin to flash. The default time will display "--". This means that the TIME is not activated and, therefore, the heater will remain on. You must press the HI/LOW/UP button or the ^{0}C/^{0}F/DOWN once again within (5) seconds to set the time. Each time you press the HI/LOW/UP button, the time will increase by 0.5 Hr. If you press the ^{0}C/^{0}F/DOWN button, the time will decrease by 0.5 Hr. The maximum value for time is 8.0 Hr. Once you reach 8.0 Hr., the time will return to 0.5 Hr. again. By holding down the HI/LOW/UP button or ^{0}C/^{0}F/DOWN for (2) seconds, the number rotation will cycle more quickly. If you do not press the HI/LOW/UP button or ^{0}C/^{0}F/DOWN within (5) seconds, the time status will switch back to the temperature status.

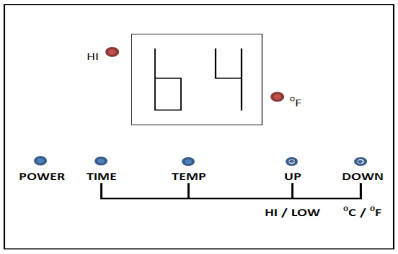


Press TIME to switch to time status, then press HI/LOW/UP button once within 5 seconds to scroll up

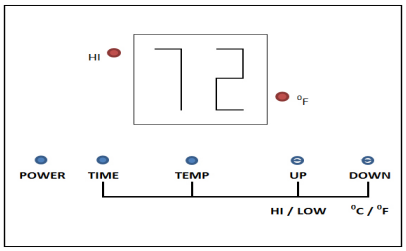




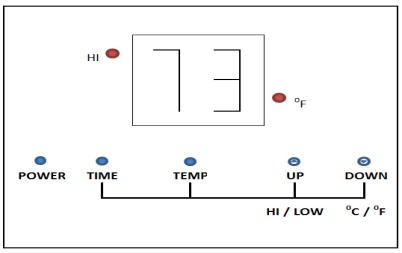
5 seconds later the value switches to ambient temperature



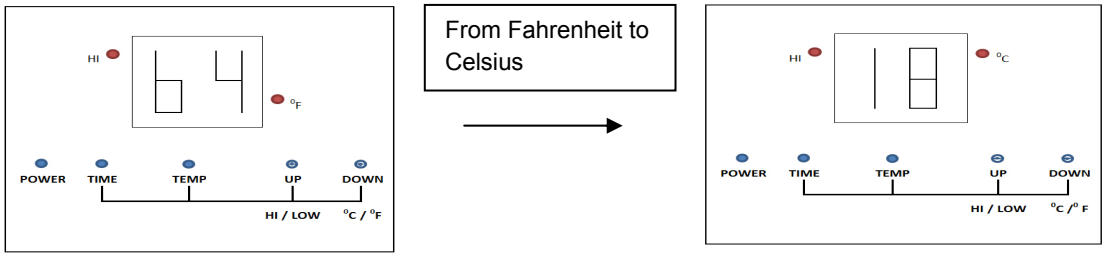
4) Again, default temperature displayed on the LED display is 72^0F. By pressing the TEMP button, the LED display will switch to the temperature status and flash. You must press the HI/LOW/UP button or ^{0}C/^{0}F/DOWN button once again within (5) seconds to set the temperature. Each time you press the HI/LOW/UP button, the temperature setting will increase by 1^0F. Press the ^{0}C/^{0}F/DOWN button and the time will decrease by 1^0F. The maximum temperature setting is 86^0F (30^0F). If you hold the HI/LOW/UP button or ^{0}C/^{0}F/DOWN button for (2) seconds, the number rotation will cycle more quickly. If you do not press the HI/LOW/UP button or ^{0}C/^{0}F/DOWN button within (5) seconds, it will display the current ambient temperature.



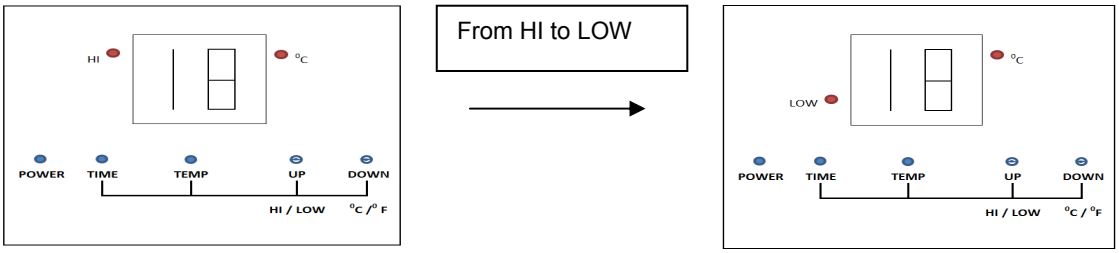
Press TEMP to switch to temperature status, then press HI/LOW/UP button once within 5 seconds to scroll up



5) By pressing the ^{0}C/^{0}F/DOWN button, you can switch the temperature format from Fahrenheit to Celsius and vice versa.



6) Press the HI/LOW/UP button to switch from HI (rated at 1500W) to LOW (rated at 750W). The default setting is HI.



7) To calibrate temperature setting, hold down the TEMP button for (5) seconds to switch to thermostat calibration status. The LED display will begin to flash. The default setting on the display is 00. The ^{0}F or ^{0}C LED light will illuminate. Press HI/LOW/UP or ^{0}C/^{0}F/DOWN button to scroll up and down for the correct calibration. The displayed temperature should match your wall or free-standing thermometer within (2) degrees. Once the desired temperature is set, press TEMP again to save your settings. (Note: To set back to factory settings, hold down the TIME button for (5) seconds. This will set all values back to default.)

8) The SunTech Portable Heater can be turned off by pressing the POWER button. DO NOT TURN OFF THE **MASTER POWER** SWITCH ON THE REAR OF THE HEATER OR UNPLUG THE HEATER UNTIL THE FAN SHUTS DOWN. If the heater is left on using the TIME function, there will be (5) second sound alert to let you know that the time is expiring. If no actions are taken, the heater will shut off.

Recommendations for Maximum Performance

1. The SunTech Portable Heater can heat a space up to 1000 square feet. Be sure not to place the heater in an area where the air flow or air movement is great.

2. Direct the outflow towards the center of the room and not against a solid structure, like a wall for example. For larger areas, place the heater within a central location.
3. The SunTech Portable Heater is designed for maximum efficiency in the 68^0 F to 77^0 F range. This is because of the ambient air moving through the heater and out constantly.
4. Existing HVAC heating system vents should be closed. This allows the heater to function in an isolated area.
5. It is not recommended to operate heater in areas exposed to non-insulated concrete or metal walls. Concrete floors should be covered to insulate the heat within the room.
6. If the heater filters become dirty or dusty, they must be cleaned for the heater to operate at its maximum efficiently.

Care, Maintenance, and Storage

Before care or maintenance is applied, always unplug the cord from the receptacle. The cabinet housing can be wiped down with water and a damp cloth or with furniture polish. The heater has a washable filter. The filter should be cleaned regularly to provide for maximum performance. Once the filter is removed, run warm water through and over the filter to remove dirt and dust. Shake all water residue from the filter and replace it back in the heater. (Note: A mild soap can be applied to assist in removing dirt and dust from the filter)

If the heater is not to be used for an extended period of time, it can be stored away. Make sure the power is turned off and the cord is unplugged from the receptacle. Wrap the cord around the handle on the rear of the portable heater. Cover the heater to prevent dust from accumulating on the heater. You may want to repack it back in its original carton. Always store the heater in a dry and dust free environment.

(Note: You may want to clean the filter prior to storing the heater away so that it is ready for operation the next time it is put in use.)

Troubleshooting

1. **PROBLEM:**
    a. If the Heat Emitter is broken or damaged
    b. If the Control Panel is not responding, the temperature reading is above 86^0F/30^0C, or there is a burning odor coming from the portable heater
    c. Or if the power cord is damaged

    SOLUTION: Contact the manufacturer immediately. **DO NOT** attempt to operate the portable heater as this may cause electric shock, fire, and/or injury.

2. **PROBLEM:**
    a. The amount of heated air exiting the front of the portable heater is reduced.

    SOLUTION: Check the electrostatic filter to make sure it is free of dust and dirt. Also check the front grill and rear air intake to make sure it is not being blocked by any kind of debris.

3. **PROBLEM:**
    a. The portable heater will not turn on.

    SOLUTION: First, test your outlet to make sure it has power. You can do this by plugging in another appliance and turning the appliance on. Secondly, check the LED display to see if it is flashing. If this is the case, press the POWER button to turn off the TIME and resume normal operation of the portable heater. Third, check the power switch to see if it is lighting up. If the outlet does have power, the LED display is not flashing, or the power switch is not lighting up, then contact the manufacturer immediately for further troubleshooting.

4. **PROBLEM:**
    a. The portable heater continues to operate even when the power switch is turned off.

    SOLUTION: Do not unplug. The portable heater has a fan that will continue to operate even when the power switch is turned off. This fan continues to run in order to cool down the portable heater. Once the fan stops running, you can then unplug the portable heater.

5. **PROBLEM:**
    a. The control panel displays no temperature or TIME.

    SOLUTION: First, check to make sure the power cord is not damaged, is plugged in, and the outlet has power. Secondly, check to make sure the control panel is not damaged. If the control panel display continues to be inoperable, contact the manufacturer for further troubleshooting.

6. **PROBLEM:**
    a. The control panel is displaying a temperature and TIME, but the portable heater does not operate.

    SOLUTION: The Signal Cable or other relevant plugs may have become disconnected. Please contact the manufacture for further troubleshooting.

7. **PROBLEM:**
    a. The heat emitter is functioning and the air outflow is working, but the temperature displayed on the LED panel does not increase.

    SOLUTION: The temperature sensor may be damaged or has become disconnected. Please contact the manufacture immediately for further troubleshooting.

8. **PROBLEM:**
    a. The display shows “Er”. This error code means the heating system is not working correctly.

    SOLUTION: Contact the manufacturer immediately. **DO NOT** attempt to operate the portable heater as this may cause electric shock, fire, and/or injury.

Limited Warranty

3 Year Limited Warranty: SunTech warranties the heating elements and electronics against defects in material and workmanship for a period of three years from the original date of purchase. **This portable heater is for INDOOR use only. Operating your portable heater outdoors will VOID this warranty. Any damage due to exposure to outdoor elements such as rain, snow, sun, wind or extreme temperatures will not be covered by this warranty.**

Extent of Warranty

This limited warranty applies to products manufactured or distributed by the SunTech brand name, is delivered in the continental United States or Canada and extends to the original purchaser only. This warranty becomes valid at time of purchase and terminates either by specified time frame listed above and/or owner transfer. **Your sales receipt showing the date of purchase of the product is your proof of purchase.**

Manufacturer Warranty

All SunTech products are manufactured with the highest quality materials and are warranted to be free from defects in material and workmanship at the time of purchase. The appliance warranty is extended through the manufacturer of the product. All exchanged parts and products replaced under this warranty will become the property of SunTech. SunTech reserves the right to change manufactures of any product part to cover any existing warranty. Any parts determined to be defective must be returned to SunTech or its representatives to obtain warranty service. You must prepay any shipping charges, export taxes, custom duties and taxes, or any other charges associated with the transportation of the parts. In addition you are responsible for insuring any parts shipped or returned. You must present SunTech with proof of purchase documents (including the date of purchase). Any evidence of alteration, erasing or forgery of proof of purchase documents will be cause to **VOID** this limited warranty. Product on which the serial number has been defaced or removed is not eligible for warranty service.

Warranty Limitations

This warranty does not apply if the unit has been subject to negligence, alteration, fabrication, misuse, abuse, repairs by non-SunTech authorized personnel, inappropriate installations, or any case beyond the control of SunTech invalidating this warranty including but are not limited to:

- Use of lacquer or paints
- Heater and other TC Unlimited, Inc. products accessories placed on non-approved surfaces
- Outdoor applications
- Normal wear and tear or weathering

Surface cracks are not considered defects in material or workmanship, as they are normal characteristics of all wood.

Disclaimers

SunTech shall not be liable for loss of use of heater or other SunTech products or other incidental or consequential costs, expense or damages. Any implied warranty shall have duration equal of the applicable warranty stated above. Under no circumstances shall SunTech or any of its representatives be held liable for injury to any person or damage to any property, however arising. Specifications are subject to change without notice or obligation.

Legal Remedies

This limited warranty gives you specific legal rights. You may have other rights, which may vary from state to state.

Customer Service

For customer service, contact your authorized dealer. If you need additional information or assistance, please contact SunTech Customer Relations Department at heaterhelp@sourcenetworksam.com.

WARRANTY CARD

Congratulations on your purchase of the SunTech Portable Heater. Please take the time to complete the following Warranty Card and mail it to:

Source Network Sales And Marketing
c/o SunTech Portable Heater
PO Box 260758
Plano, TX 75026

Please include a copy of your sales receipt showing date of purchase as this will serve as proof of purchase.

Warranty will be VOID if the following warranty card is not mailed back within 60 days of purchase date along with proof of purchase.

****Serial number (S/N) is located on the heater's front panel, rear panel, or on the carton.****

DETACH HERE

. . . . . .

WARRANTY CARD

All fields must be completed to validate the warranty.

Name: _____

Address: _____

City: _____State: _____Zip Code: _____

Phone Number: _____

Purchase Date: _____

Model:_____

Serial Number: _____